



Hempstead Avenue Safety Enhancements

Presentation to Queens Community Board 13 Transportation Committee

June 16, 2022

Hempstead Avenue

Presentation Overview

- Background
- Existing Conditions
- Project Proposal
- Next Steps



Pedestrian mid-block crossing on Hempstead Avenue near
218th Street

Background

1

Background

Planning Framework

- Freight Mobility Unit is committed to strategies outlined in its strategic plan: *Delivering New York: A Smart Truck Management Plan for NYC*
 - **Safety:** improve the safety of truck travel at intersections and along corridors
 - **Sustainability:** foster the sustainable and environmentally responsible movement of goods
 - **Freight Efficiency:** Improve the efficiency of freight movement to, from, and within NYC
 - **Partnerships & Knowledge:** Grow public and private partnerships to increase knowledge about freight
- DOT is focusing on improving 1,000 intersections to improve safety for all road users
- The Freight unit aims to address truck priority safety corridors; streets where there is a concentration of truck involved crashes with vulnerable road users (pedestrians and cyclists)



Delivering New York Plan

Freight Mobility Unit Overview

Freight Toolkit

What We Do: Reduce the impacts of trucks on communities and infrastructure while improving the sustainability and efficiency of truck deliveries

How We Do it: Wide range of strategies, policies and programs in our toolbox



Off-Hour Deliveries



Expand Loading Zones



Truck Route Enhancements



Street Improvement Projects



Truck Electrification & Decarbonization



Truck Safety Education, Outreach, & Partnerships



Truck Safety and Compliance Enforcement Coordination



Microdistribution Hubs



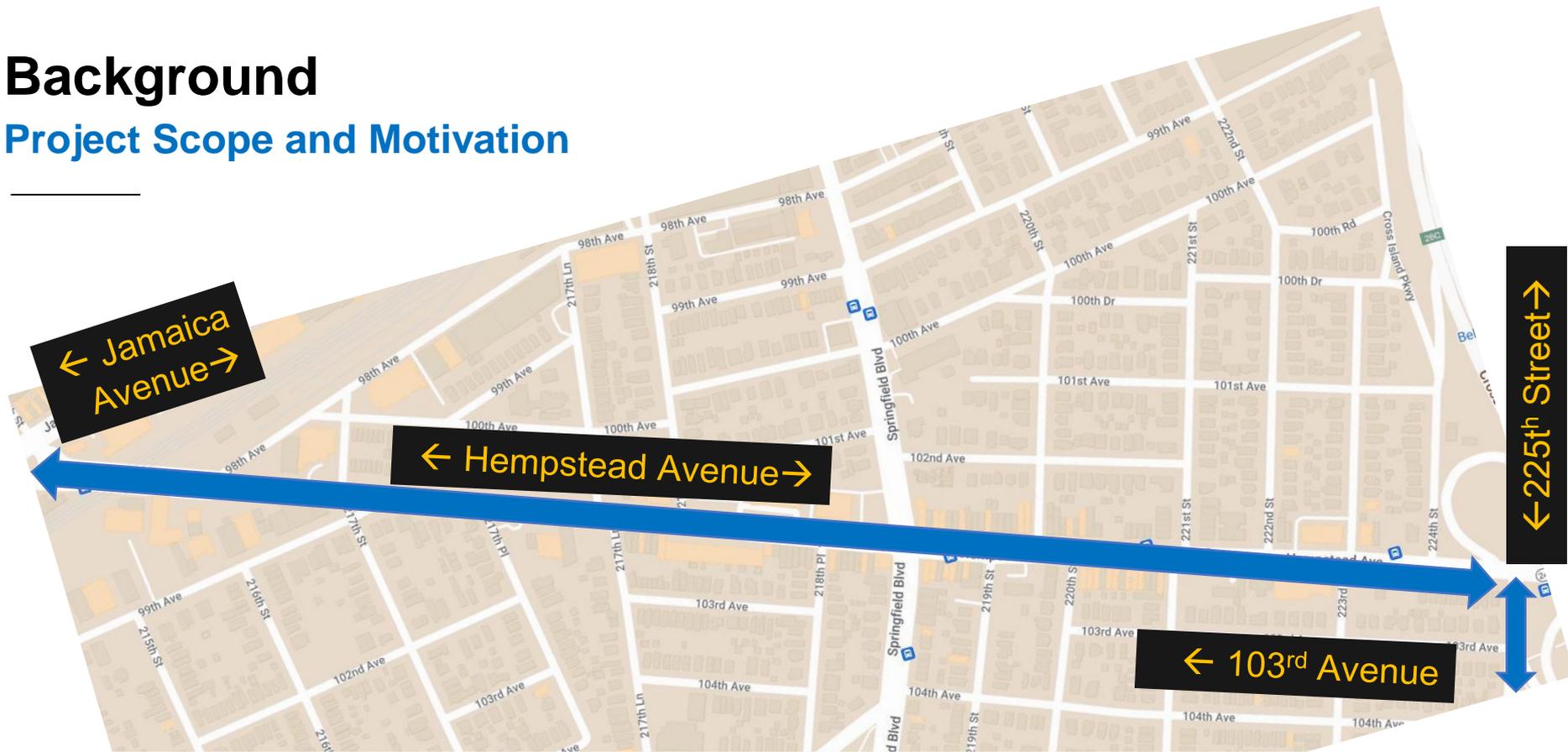
Commercial Cargo Bike Program



Blue Highways

Background

Project Scope and Motivation



- Hempstead Avenue is a Vision Zero corridor; between 2015 and 2019 there have been approximately 12 killed or severely injured pedestrians, cyclists, and motorists per mile
- The corridor is a major through truck route that connects Nassau County to New York City
- Hempstead Avenue is a pedestrian priority corridor; there are multiple deficiencies (i.e. long crossings)
- Accessibility to green space along 225th Street is limited
- Existing condition of concrete medians pose multiple safety concerns

Background

Project Location – Previous Safety Enhancements

2016-2017

- LPI added at 217th Lane
- Left turn traffic calming installed on Springfield Boulevard at Hempstead Avenue
- Crosswalk markings upgraded to high visibility corridor-wide on Hempstead Avenue

2018-2019

- Concrete neckdowns built at NW/SE corners on Springfield Boulevard at Hempstead Avenue
- Signal added at 225th Street and 103rd Avenue
- One-way conversion of 103rd Avenue near 225th Street
- Remaining crosswalk markings upgraded to high visibility on Hempstead Avenue

2021-2022

- Signal added at Hempstead Avenue and CIP northbound off-ramp
- Signal and new crosswalk added at Hempstead Avenue and 218th Street
- Bus bulb installed near 225th Street (south curb)
- Crosswalks added near CIP off-ramp area
- New pedestrian ramps installed at 222nd Street (NE/NW corners)
- LPIs implemented at 218th Street and 221st Street
- Intersection control study (for signal installation) opened at Hempstead Avenue and 98th Avenue



A new signal and crosswalk was installed on Hempstead Avenue at 218th Street in 2021

LPI = leading pedestrian interval
CIP = Cross Island Pkwy

Existing Conditions

2

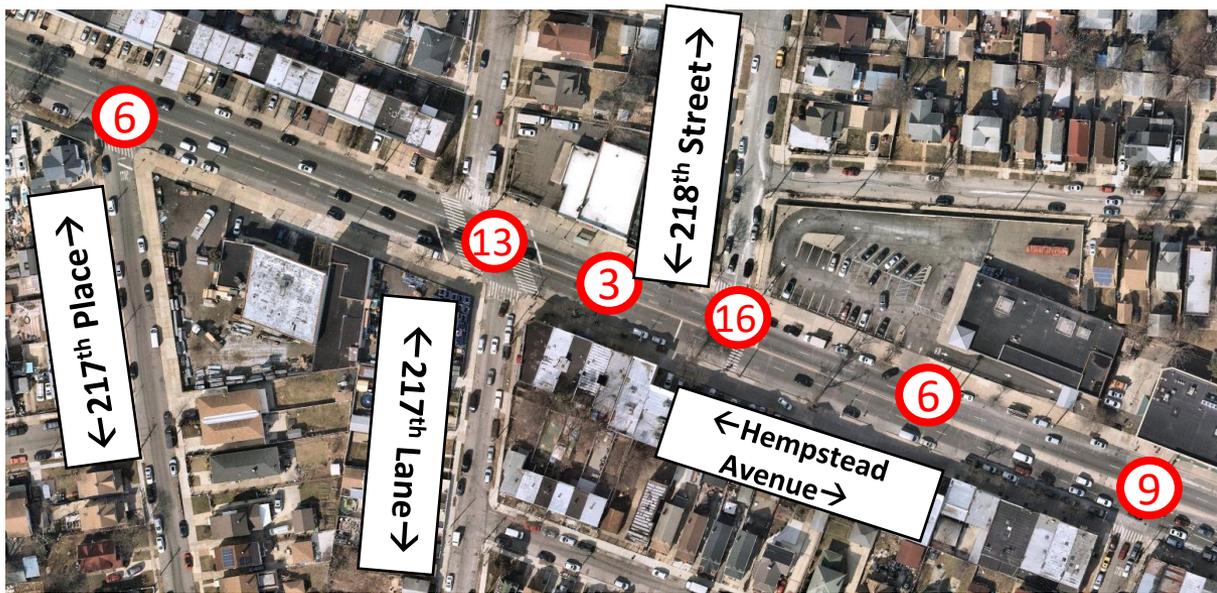
Crash History

2014-2019 (5 Year Summary)

	Total Injuries	Severe Injuries
Pedestrians	7	2
Cyclists	2	0
Motor Vehicle Occupant	83	0
Total	92	2

	Total Injuries	Severe Injuries
Pedestrians	6	0
Cyclists	1	0
Motor Vehicle Occupant	46	4
Total	56	4

Severe injuries document at 98th Avenue, 217th Street, 217th Place, 217th Lane and 218th Street



Overview of crash locations on Hempstead Avenue (Jamaica Avenue to 218th Street)

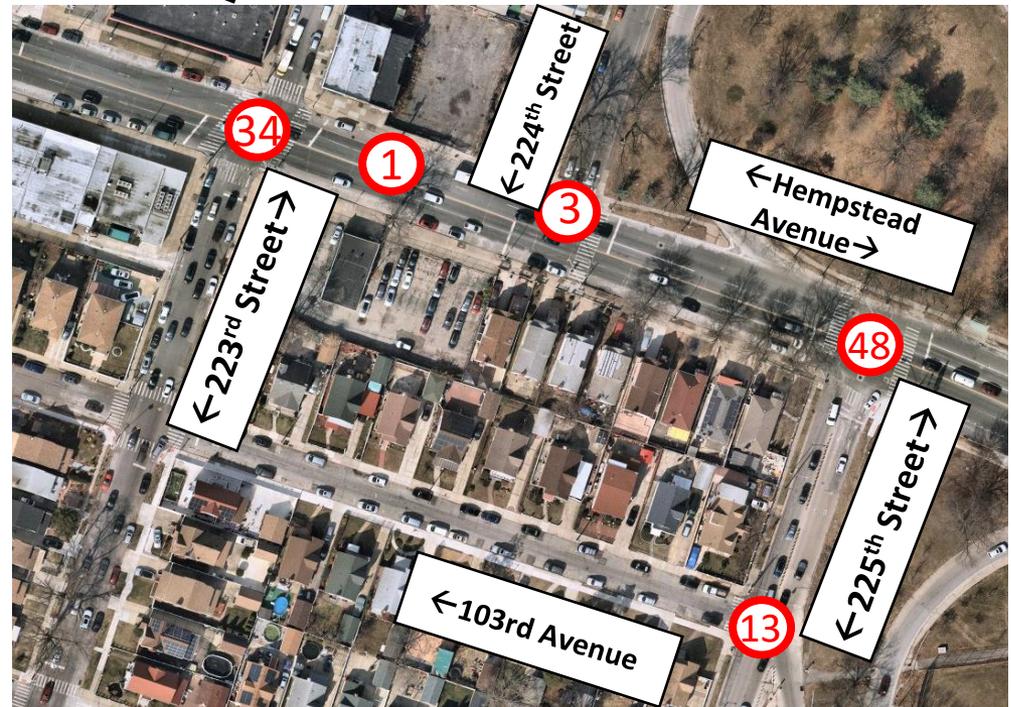
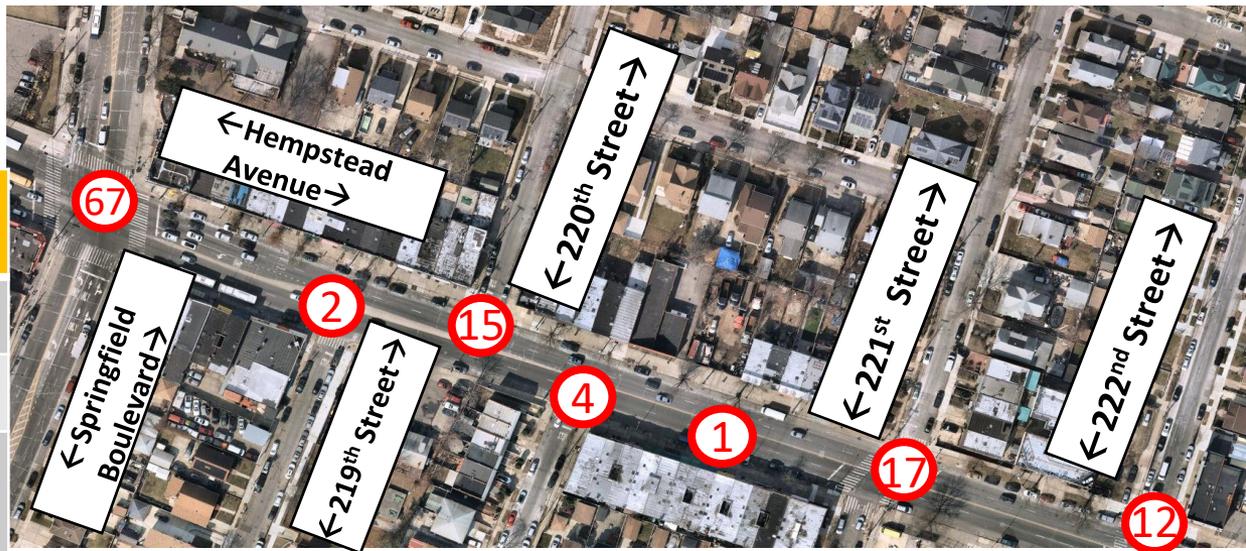
Crash History

2014-2019 (5 Year Summary)

	Total Injuries	Severe Injuries
Pedestrians	22	2
Cyclists	1	0
Motor Vehicle Occupant	95	3
Total	118	5

	Total Injuries	Severe Injuries
Pedestrians	1	0
Cyclists	1	0
Motor Vehicle Occupant	97	2
Total	99	2

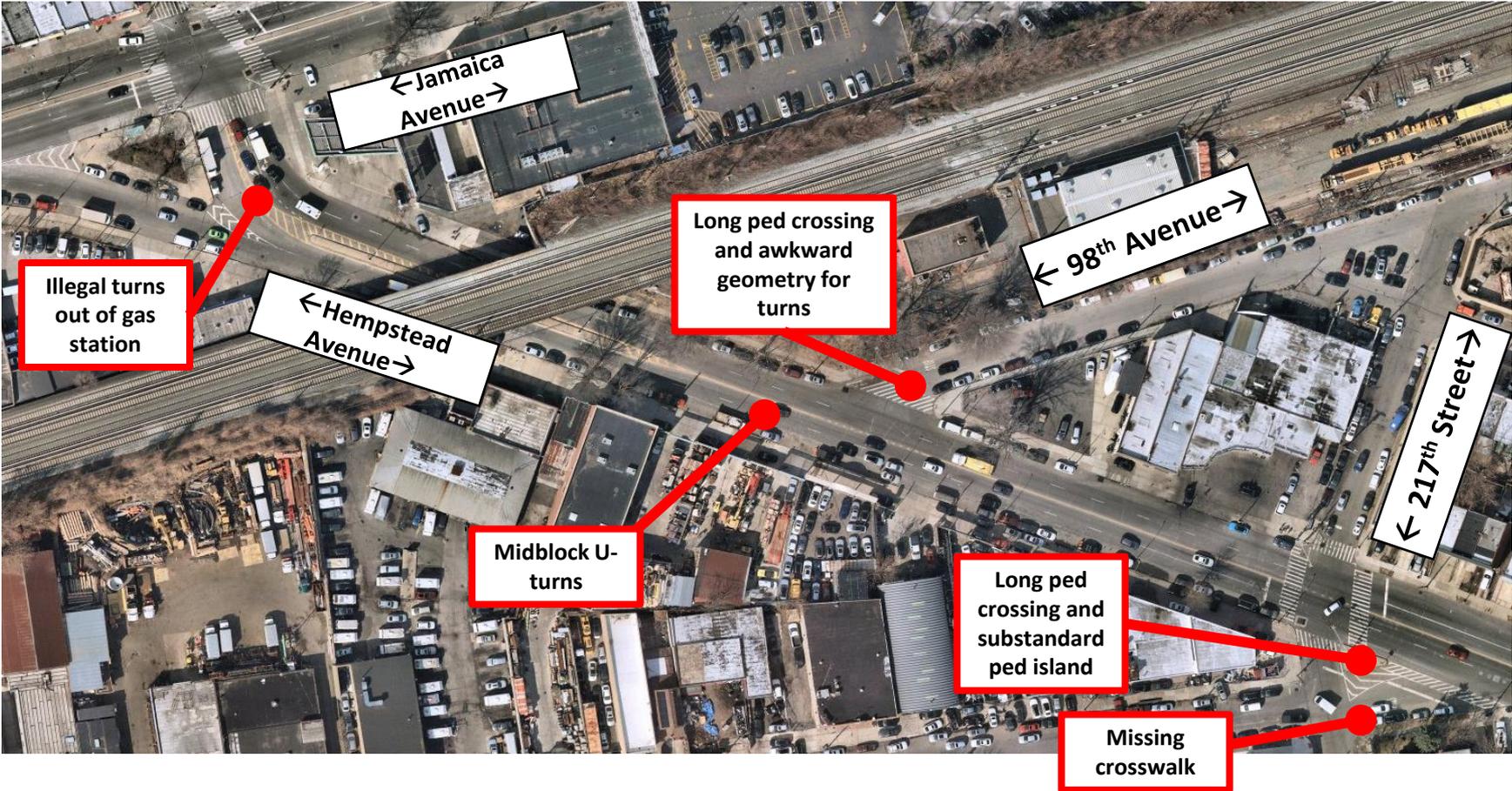
Severe injuries document at Springfield Boulevard, 220th Street, 221st Street and 225th Street



Overview of crash locations on Hempstead Avenue (Springfield Boulevard to 225th Street)

Hempstead Avenue – Existing Conditions

Jamaica Avenue to 217th Street

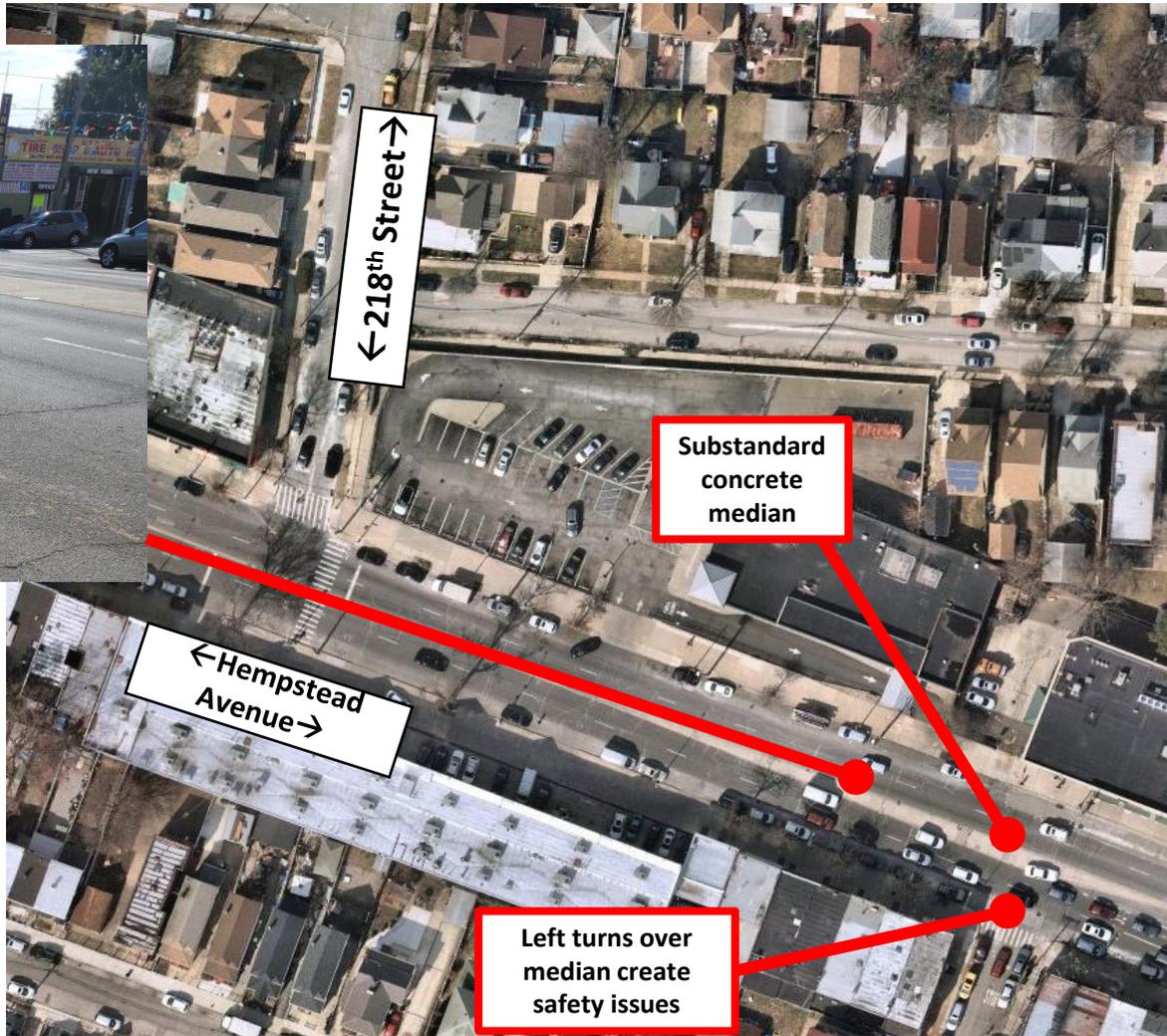


Hempstead Avenue – Existing Conditions

217th Place and 218th Street

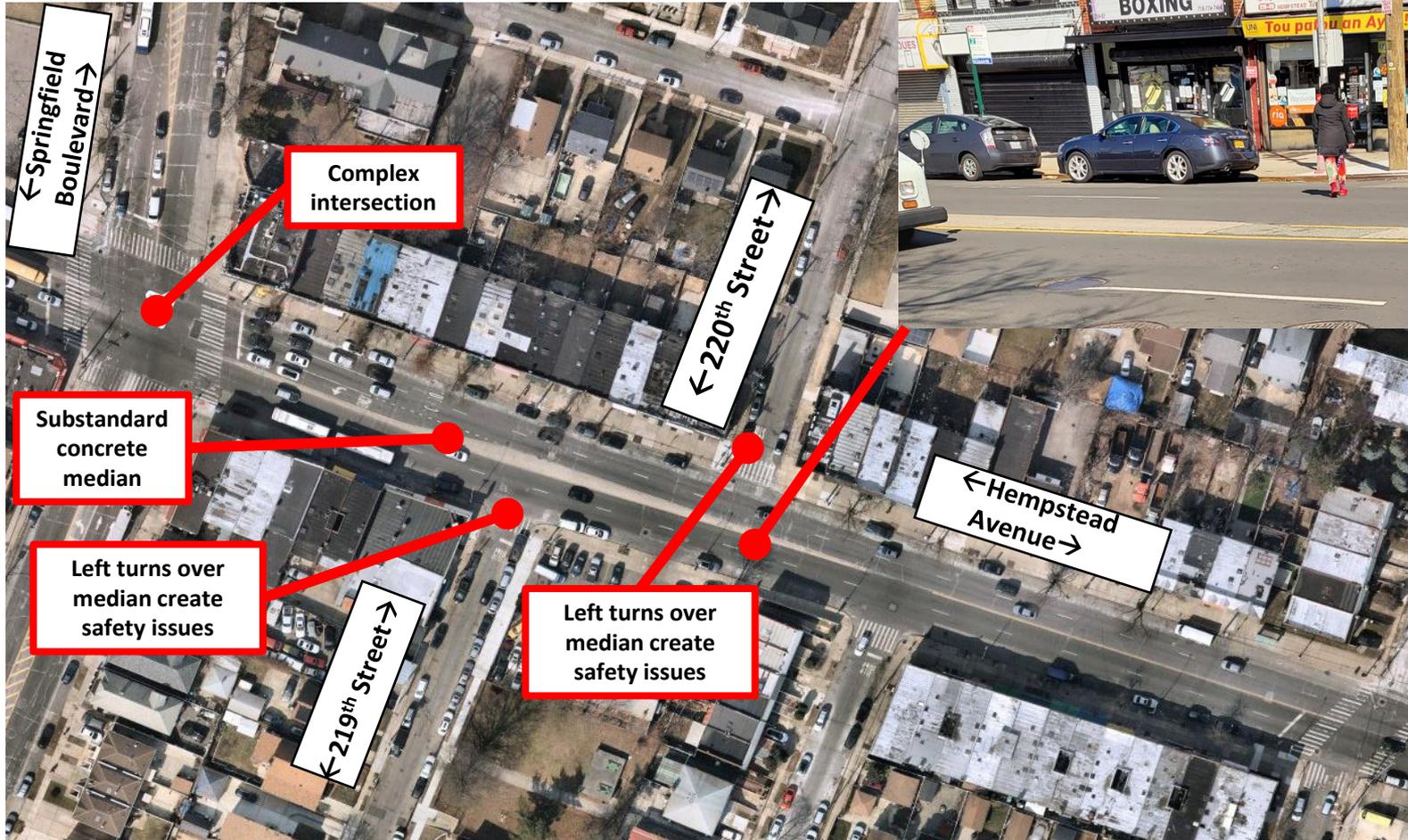


Substandard flat medians are often driven over by vehicle



Hempstead Avenue – Existing Conditions

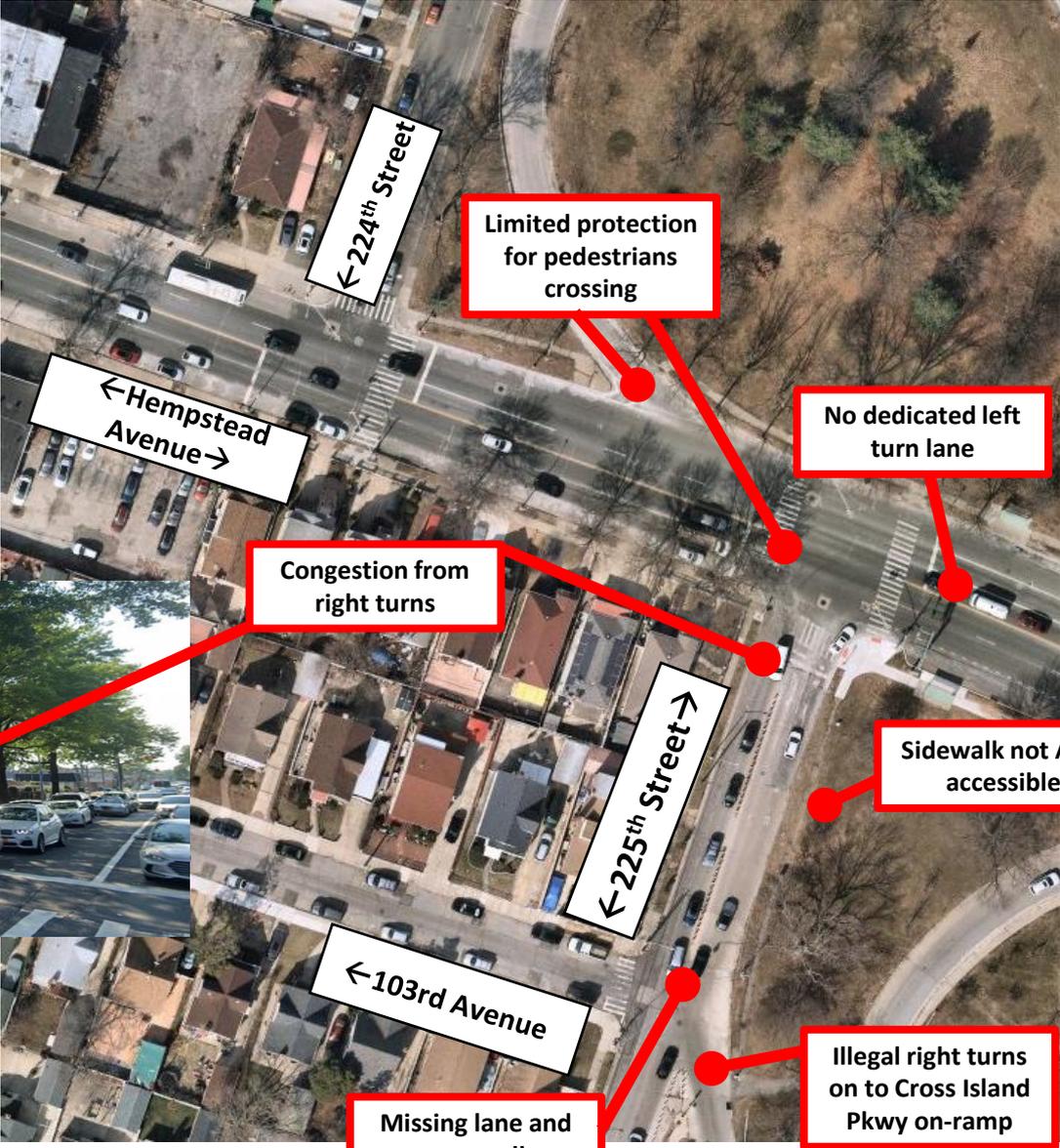
Springfield Boulevard to 220th Street



Midblock crossing outside of crosswalk

Hempstead Avenue – Existing Conditions

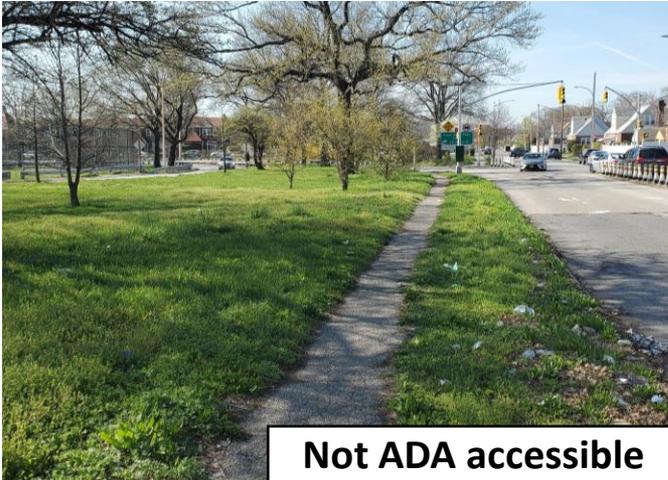
225th Street/ Cross Island Parkway Area



Queue spillback from 225th Street to Hempstead Avenue

Existing Conditions

Hempstead Avenue Corridor



Existing Conditions

Peak Hour Traffic Count (PM Peak)

- Volumes are highest within the project area during the PM peak (4:45-5:45 PM, with 2465 vehicles at 225th Street intersection)
- Conflict between eastbound right (right on red after stop permitted) and westbound left (green left turn arrow) turns with existing conditions
- Around 5% of all vehicles passing through the intersection during peak periods are trucks
- Many vehicles passing through the intersection are accessing the Cross Island Parkway (73%)



Hempstead Avenue and 225th Street

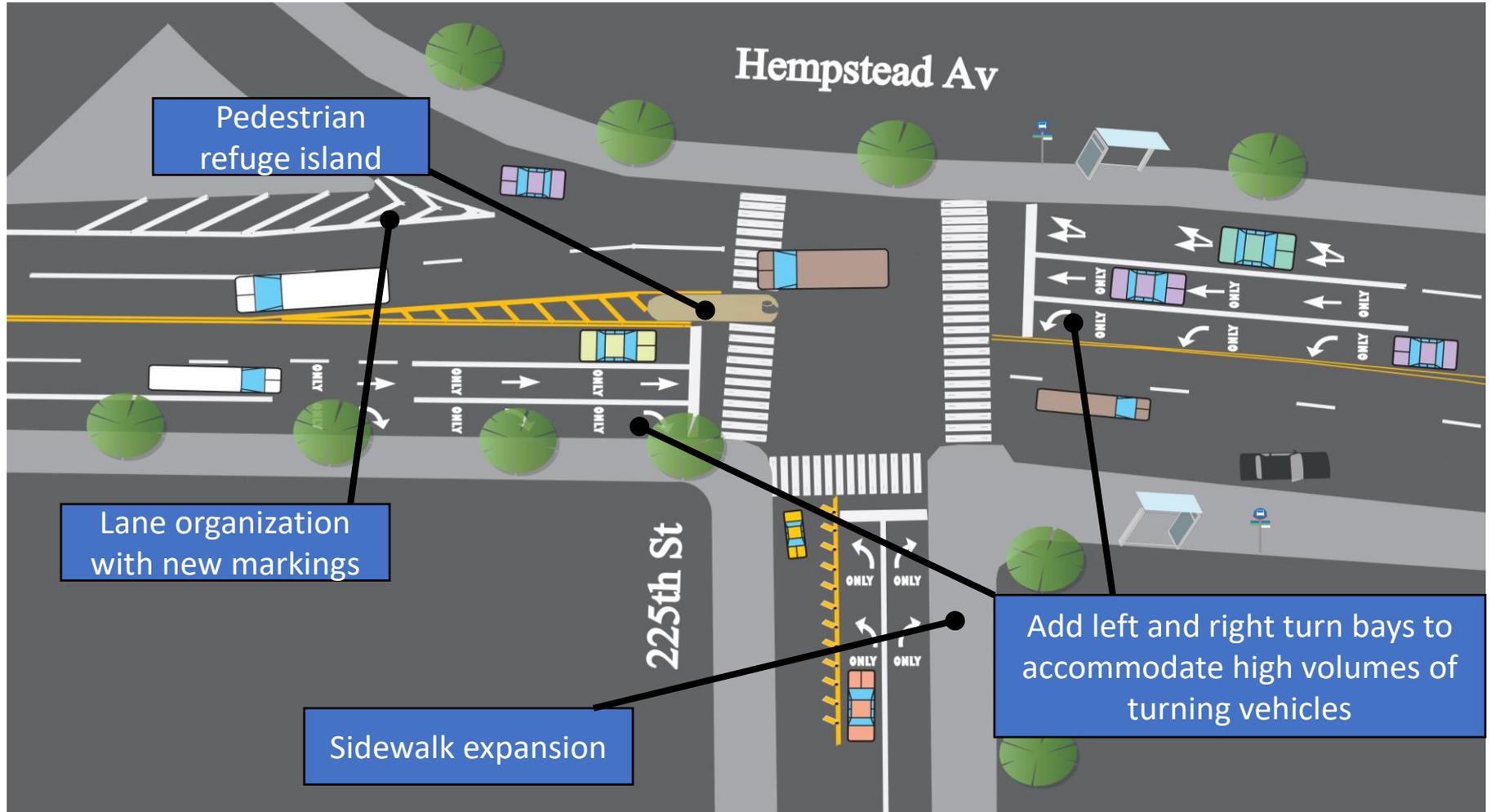


Project Proposal

3

Proposed Safety Improvements

Hempstead Avenue and 225th Street



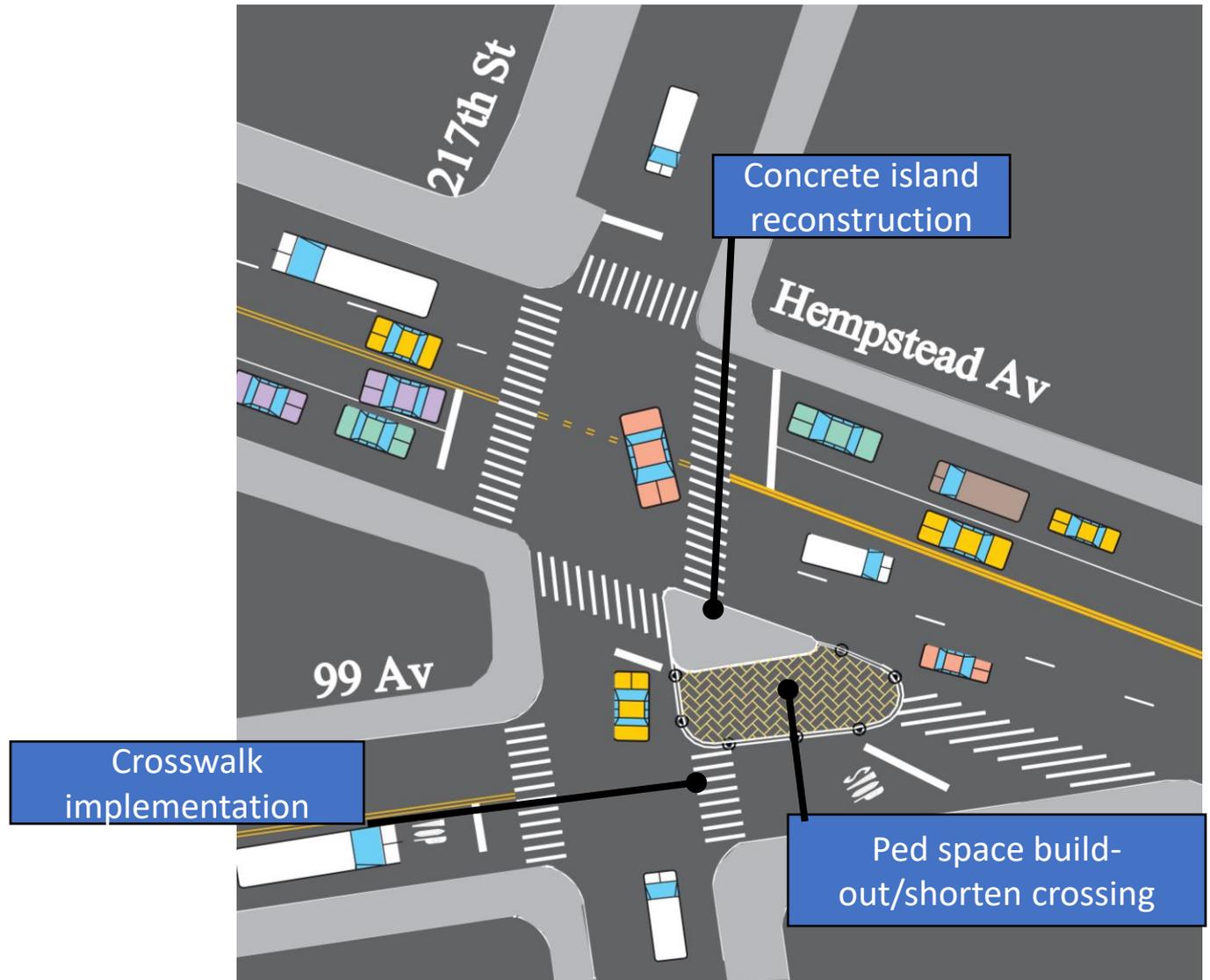
Proposed Safety Improvements

225th Street and 103rd Avenue



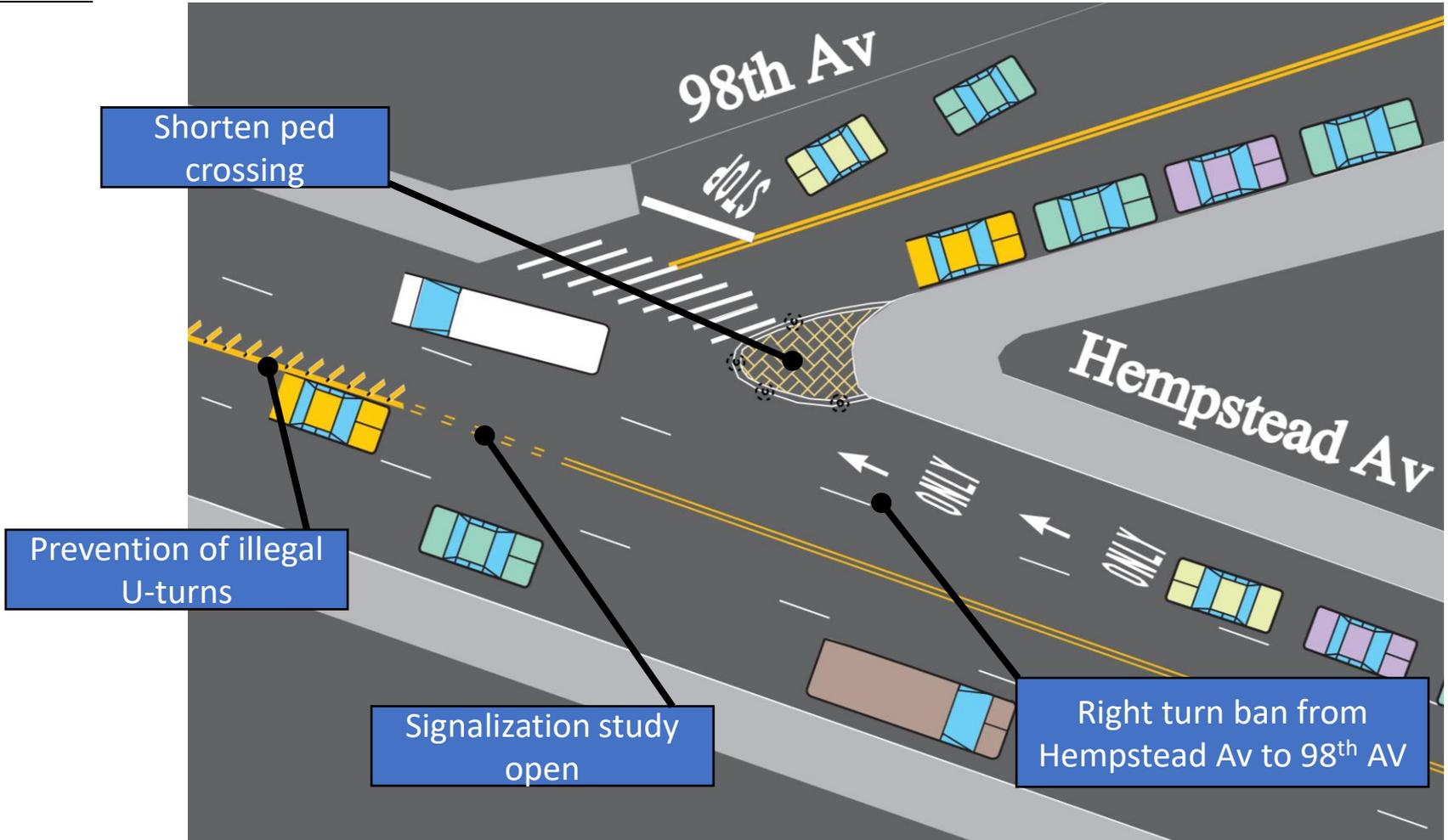
Proposed Safety Improvements

Hempstead Avenue and 217th Street



Proposed Safety Improvements

Hempstead Avenue and 98th Avenue



Project Benefits Summary

Improving Corridor Safety

- Shorten crossing distances for pedestrians
- Provide pedestrian refuge space
- Improve accessibility
- Mitigate illegal turns by design
- Upgrade existing medians to standard



Reflective of the proposed condition for Hempstead Avenue at 225th Street (E 144th Street and Grand Concourse, Bronx)



Reflective of the proposed condition for 98th Avenue at Hempstead Avenue (South Williamsburg, Brooklyn)

Next Steps

4

Next Steps

Timeline

Summer/Fall 2022: Planned implementation
(likely in phases)

Winter 2022/23: Post-implementation monitoring

Safety

- Promote safety for all road users via street design

Communication

- Follow-up and address issues and/or concerns identified by local stakeholders

Continued Monitoring

- Continue to monitor conditions on Hempstead Avenue following implementation of safety enhancements



Hempstead Avenue and 98th Avenue

Thank You!

Questions?



NYCDOT



nyc_dot



nyc_dot



NYCDOT